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1912

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C. & G. SURVEY.
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COAST AND GEODETIC SURVEY

Superintendent.

State: *TN.*

DESCRIPTIVE REPORT.

Top. Sheet No. *3274*

LOCALITY:

*Main-East Coast -
Pauvalu Pt to Pohakuloa
Ohr.*

1912

CHIEF OF PARTY:

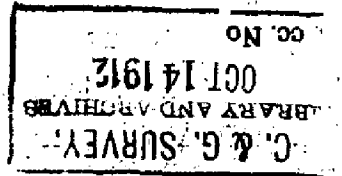
Gauger & Lutz

11-4645

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Mau, T. H.



Puuiki
to
Panwahu Point

Plans Table Survey & Inking by E. C. Lutz
Aid, C. & G. Survey
May — 1912

Projection by J. P. Gagner Asst. C. & G. Survey
Chief of Party
Scale 1:20000

Shoreline : 26.0 sta. miles
Roads : 10.0 "
Area : 10.0 sq. sta. "

Pt. Points	Latitude	Longitude
Verick Sand	20° 42 1058 ^m	155° 59 1408 ^m
Oven	42 1287	59 991
Oven	42 1675	59 867
Tomb	43 554	59 851
Tomb	43 1109	59 368
Tomb	43 1111	59 371
Tomb	43 1502	59 328
House S.E. corner	44 306	59 499
Water Trough End of G. trough	44 1829	59 288
Grill Stage	45 407	59 720
Catholic Ch. Spire	45 619	59 681
Protestant Ch. Spire	45 606	59 612
Flag staff	45 1072	59 509
Church Capola	45 1243	59 552
Hana right	45 1153	58 1608
Church Capola	45 1529	59 944
Tomb	46 19	59 677
Tomb	46 41	59 671
Tomb	46 73	59 713
Cairn	46 188	59 09
"	46 1134	59 440
"	47 270	59 1331
"	47 561	59 1712
"	47 867	156 00 423
"	47 1354	00 386
"	48 22	00 1170
"	48 71	01 04
"	48 755	01 1271
"	48 1153	02 820
"	48 1077	02 1469
" (iron pipe in center)	48 1302	03 144
"	48 1167	03 981
"	49 310	04 119
"	49 1007	04 1330
Bolt cemented to rock	49 1250	05 239
Cairn	49 1549	05 983

P. H. Points		Latitude & Longitude	
Cairn		20° 49' 15.72"	156° 05' 11.51"
Derrick (new)		49 1545	05 1469
Derrick (old)		49 1368	05 1627
School Flagstaff		49 1224	05 1058
Catholic Church Spire		49 1324	05 1127
Protestant Church Spire		49 1287	05 1137
Cairn		49 1294	06 350
Cairn		49 1343	06 633
Cairn		49 1279	06 1219
Cairn		49 1443	07 47
Cairn		50 279	07 445
Peak or Highest Point		50 940	07 704
Cairn		50 746	07 1137
Tomb		50 1203	07 1551
Cairn		50 1600	07 1344
Catholic Church Spire		50 1818	08 265
North waterfall		51 227	07 1534
S.E. gable of Schoolhouse		51 525	08 789
Cairn		51 872	07 1549
Panvalu Point Light	See Description of Triangulation Stations, Vol 1, & Panvalu		
Not: Cairns are pyramids of loose rock 3 to 4 ft. high.			
Cairn	20° 44' 74"	155° 59' 526"	
Pahuoloung (2" iron pipe in concrete core)	44 593	156 00 395	

Descriptive Report to Accompany
Sheet # **3274**

Puuki to Pauvalu Point
Maui, I. H.

This coast has a comparatively uniform surface configuration and slopes uniformly upward to the rim of the crater, except at the extreme westward where the uniformity is broken by deep gulches. A sugar plantation extends from Puuki to a half mile north of Hana. Northwest of these same fields is a comparatively recent lava flow which is barren & ragged for a half mile inland, gradually becoming covered with vegetation & puhala trees as one goes up the mountain. Northwest of this lava flow there is another fertile tract of same land with the village of Kaleku in its approximate center. Westward from Kaleku the slopes are wooded with puhala, guava & rubber trees.

The shore line from Puuki to Hana is a succession of jagged points with numerous inshore rocks. The island of Alan lying off this coast is 150 ft high & makes a prominent landmark. Puuki Head, the high red-bald headland on the south side of the Hana landing, rising from a low shore line to a height of 392 ft is the most prominent & historical landmark on the eastern end of Maui. From Hana northwestward six miles, the shore line is more or less abrupt but generally less than 50 ft high.

From thence northwestward to Kahiku the coast terminates at the shoreline in a bold uniform bluff averaging about 150 ft. high. From Kahiku to Waipua high bluffs & deep gulches alternate. Northwestward one mile from Waipua to Panyaly Point the shoreline is abrupt with bluffs averaging 60 to 100 ft. in height. Broken Manu Rock 100 ft. high off Panyaly Point is a distinctive & unmistakable landmark.

In addition to the landmarks already enumerated the various subsidiary volcanic cones interrupting the general slope toward the shore are quite distinctive. Keakaamanu Papuolona & O Kahaula are grassy cones. Iwi o Pele has a conspicuous clump of brush on its very summit & Olopana is well wooded.

The rainfall over the Hana District is very light but rapidly increases as one approaches Kahiku. From Kahiku northwestward the rainfall is abundant & reported to be over 400 inches annually. The prevailing winds are the N.E. trades but Hana seems to be the dividing point for these winds as they sweep around both sides of the island & a belt of comparative calm lies a mile or either side of Hana Harbor and thence ^{the winds} gradually strengthen in proportion to the distance away from this neutral zone.

There is a small anchorage off Pohakuloa Cove & a landing can be made here under favorable weather conditions. On entering the anchorage a careful look-

out must be kept for the charted rocks as they are only about 12 ft above high water.

The Krokai landing is a trifle more sheltered for landing small boats than at Pohakuloa. Vessels approaching this anchorage should observe every precaution inasmuch as the water is discolored & apparently shoal in this vicinity. Small boats can readily be beached in this cove.

Both of the above landings were established for the Reciprocity Sugar Co & since the latter's abandonment the landings are rarely used. Both however afford good protection from the regular trade winds and are open to the weather.

The inland water from Krokai to Alua Islet is discolored, the low point being fringed by a coral reef as shown. Similarly it is believed that Alua Islet is connected with the mainland by a reef altho' that point could not be definitely decided from the beach.

Hanalei or Hanalei Cove is the best natural harbor on Kauai. Hanalei Point & Hanalei Head successfully cut off all the seas resulting from the regular trade winds & even Kona storms. The charted rocks on either side of the entrance are pinacles 4 to 6 ft above high water & the middle ground shoal can always be detected by breakers during all except absolute flat weather. A coral ledge extends from the lighthouse to the mooring buoy as shown. Vessels of 10 ft draft may safely anchor near the red buoy but deeper draft vessels must anchor farther out. Water is piped to the boat landing & boats can be beached directly inshore from the mooring buoys.

The Hana light is mounted on a pole & has an elevation of 109 ft, showing fixed red in all directions.

The anchorage & landing at Kahiku furnishes only slight protection from the regular trade winds & is a difficult place to land during heavy weather. The shoaled rocks project three to four feet above high water in this vicinity. The regular Inter-Island boat makes weekly calls at this landing, freight warranting on their way to Hana.

The ledge & sunken rocks off Hailua are practically all awash at extreme high water.

The Pauvalu Point light is an automatic intermittent white light 123 ft above sea level. The rectangular tarp & skeleton pyramidal steel framework upon which the light is mounted is about fifteen feet high & painted white.

The survey is controlled by triangulation data furnished by the Territorial Survey Office. Several short traverses of a mile or more were made, all closing with inappreciable errors.

The needle showed a range in declination from $6^{\circ} E$ to $15^{\circ} E$. Due to local attraction of the iron bearing lava flows.

Report by C. C. Dutz, Asst. U. S. Survey
Revised & Supplemented by J. D. Bangier, Asst. U. S. S.